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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/017,268	12/14/2001	Elisa M. Cross	57013US002	6070

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EXAMINER

KUMAR, SRILAKSHMI K

ART UNIT PAPER NUMBER

2629

DATE MAILED: 10/10/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/017,268

Applicant(s)

CROSS ET AL.

Examiner

Srilakshmi K. Kumar

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 May 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-43 and 49 is/are pending in the application.
- 4a) Of the above claim(s) 19-43 and 49 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

The following office action is in response to the Appeal Brief filed, May 15, 2006. Claims 1-43, and 49 are pending, with claims 19-43 withdrawn from consideration. Claims 44-48, 50 and 51 are cancelled. The finality of the previous office action has been withdrawn.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-7 and 15-18 are rejected under 35 U.S.C. 102(b) as being anticipated by Matsuda et al (US 5,541,370).

With reference to **claim 1**, Matsuda et al. teaches a method for making a touch activated user input device (Fig. 1, item 1A) comprising: providing a first substrate (15) comprising a first conductive coating (12, col.4, lines 37-40); inkjet printing a plurality of dots (13, col. 6, lines 66-col. 7, lines 3) on the first conductive coating (fig. 1); hardening the dots to form spacers adhered to the first substrate (13, col. 4, lines 54-59, col. 6, lines 66-col. 7, lines 3); and placing a second substrate (14) comprising a second conductive coating (11) over the first substrate such that the spacers maintain a distance between the first and second substrates (Fig. 1) to prevent detection of a touch location when no external force is applied and allow detection of a localized touch location when a sufficient localized external force is applied between the first and second substrates (Fig. 1, col. 4, lines 11-19, 65-col. 5, lines 7).

With reference to **claims 2, 3 and 7**, Matsuda et al. teaches that the dots are comprised of a nanocomposite comprising inorganic nanoparticles (resin, col. 6, lines 66-67), wherein the nanoparticles include silica nanoparticles and hexanediol diacrylate (col. 7, lines 44-65).

With reference to **claims 4 and 5**, Matsuda et al teaches wherein the nanoparticles are present in an amount of about 5%, or 10% to 40% by weight of the nanocomposite (col. 6, lines 36-44).

With reference to **claims 6 and 16**, Matsuda et al disclose wherein the nanoparticles have an average diameter in a range of about 10 to 30 nm and where they have heights of about 2 microns or more and have height to diameter aspect ratios of about 1:10 or more (col. 5, lines 8-22).

With reference to **claim 15**, Matsuda et al. teaches that the first and second conductive coatings each comprise a transparent conductive coating (col. 4, lines 1-51).

With reference to **claim 17**, Matsuda et al. teaches wherein the step of ink jet printing comprises ink jet printing a material onto a pre-existing dot (col. 5, lines 5-42).

With reference to **claim 18**, Matsuda et al. teaches that the user touch input device is used with an electronic display (col. 1, lines 7-15).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 8-14 are rejected under 35 U.S.C. 103(a) as being obvious over Matsuda et al (US 5,541,370) as applied to claims 1-7 and 15-18 above, and further, in view of Young et al (US 6,883,908).

The applied reference, Young et al, has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art only under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 103(a) might be overcome by: (1) a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not an invention "by another"; (2) a showing of a date of invention for the claimed subject matter of the application which corresponds to subject matter disclosed but not claimed in the reference, prior to the effective U.S. filing date of the reference under 37 CFR 1.131; or (3) an oath or declaration under 37 CFR 1.130 stating that the application and reference are currently owned by the same party and that the inventor named in the application is the prior inventor under 35 U.S.C. 104, together with a terminal disclaimer in accordance with 37 CFR 1.321(c). This rejection might also be overcome

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by showing that the reference is disqualified under 35 U.S.C. 103(c) as prior art in a rejection under 35 U.S.C. 103(a). See MPEP § 706.02(I)(1) and § 706.02(I)(2).

With reference to **claims 8 and 9**, Matsuda et al. fail to teach where the ink jet printing the plurality of dots by usage of a heated gel composition, wherein the gel is a nanocomposite gel. Young et al teach a energy curable composition formulated with thickening properties such that the compositions tend to exist as a thickened fluid or gel and one state, but exist as a low viscosity fluid when subjected to a threshold level of suitable energy. Therefore the composition may be ink jetted as a low viscosity fluid when subjected to energy of the ink jet print head, but then quickly thicken or gelled after being printed to minimize dot gain (col. 5, lines 40-65).

Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention to allow a composition to be in the form of a gel as taught by '312 to be used as the composition in a device similar to that which is taught by Matsuda et al. in order to thereby provide more control when forming the dots on the touch panel.

With reference to **claim 10**, Matsuda et al. teaches that the dots are comprised of a nanocomposite comprising inorganic nanoparticles, wherein the nanoparticles include silica nanoparticles dispersed in an energy curable fluid vehicle (col. 6, lines 66-67).

With reference to **claim 11**, Matsuda et al. teach the usage of hexandiol diacrylate material (col. 7, lines 44-65)

With reference to **claims 12-14**, Matsuda et al teaches wherein the nanoparticles are present in an amount of about 5%, or 10% to 40% by weight of the nanocomposite (col. 6, lines 36-44). Matsuda et al disclose wherein the nanoparticles have an average diameter in a range of

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about 10 to 30 nm and where they have heights of about 2 microns or more and have height to diameter aspect ratios of about 1:10 or more (col. 5, lines 8-22).

Response to Arguments

6. Applicant's arguments, see Appeal Brief, filed May 15, 2006, with respect to the rejection(s) of claim(s) 1-18 under 35 USC 103 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Matsuda et al in view of Young et al.

Conclusion

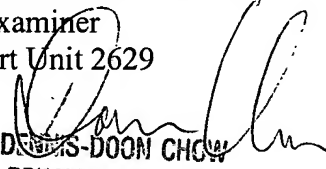
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Srilakshmi K. Kumar whose telephone number is 571 272 7769. The examiner can normally be reached on 9:00 am to 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sumati Lefkowitz can be reached on 571 272 3638. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

SKK
September 30, 2006

Srilakshmi K. Kumar
Examiner
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DENNIS-DOON CHOW
PRIMARY EXAMINER